

Notice of Allowability

Application No.

10/657,878

Examiner

Deborah Malamud

Applicant(s)

KROLL ET AL.

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/30/06.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. The examiner acknowledges the amendments received 30 October 2006. New claims 14-24 have been added; claims 1-24 are pending.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Applicant's arguments, see "Remarks," pages 7-8, filed 30 October 2006, with respect to claims 1, 8 and 13 have been fully considered and are persuasive. The rejection of claims 1-7 under 35 U.S.C. 103(a) as being unpatentable over Mouchawar et al (U.S. 6,553,259) in view of Bradley et al (U.S. 2003/0208241); of claims 8-11 and 13 as being unpatentable over Andersson et al (U.S. 5,846,264) in view of Bradley et al (U.S. 2003/0208241); and of claim 12 as being unpatentable over Andersson et al (U.S. 5,846,264) in view of Bradley et al (U.S. 2003/0208241) and in further view of Olson et al (U.S. 6,731,978) has been withdrawn.

Allowable Subject Matter

4. Claims 1-24 are allowed.
5. The following is an examiner's statement of reasons for allowance:

Claim 1 is a system comprising a pacing unit operative to deliver primary pacing pulses and backup pacing pulses to the ventricles of the heart; a capture detection unit operative to detect loss of capture of both primary pacing pulses and backup pacing

Art Unit: 3766

pulses in the ventricles; and a capture-based ventricular tachycardia detection unit operative to detect a ventricular tachycardia based upon loss of capture of a ventricular backup pulse as detected by the capture detection unit. Claim 8 is a method comprising delivering primary pacing pulses to the ventricles of the heart; verifying capture of the primary pacing pulses; delivering a backup pulse to the ventricles of the heart upon detection of a loss of capture of a primary pacing pulse; verifying capture of the ventricular backup pacing pulses; detecting a ventricular tachycardia based upon detection of loss of capture of a backup pulse in the ventricles as detected by the capture detection unit. Claim 13 is a system comprising means for delivering primary pacing pulses to the ventricles of the heart; means for verifying capture of the primary pacing pulses; means for delivering a backup pulse to the ventricles of the heart upon detection of a loss of capture of a primary pacing pulse; and means for verifying capture of the ventricular backup pacing pulses; and means for detecting a ventricular tachycardia based upon loss of capture of a ventricular backup pulse.

It is well known in the art to provide a primary pacing pulse to a patient, followed by a backup pacing pulse if the primary pacing pulse results in a loss of capture.

However, it is neither explicitly taught nor obvious to one of ordinary skill in the art at the time of the invention to detect a ventricular tachycardia based on the loss of capture of a backup pacing pulse.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 3766

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Malamud whose telephone number is (571) 272-2106. The examiner can normally be reached on Monday-Friday, 9.00am-5.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571)272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



CARL LAYNO
PRIMARY EXAMINER

ACTING SPE, Au 3766

12/29/2006



Deborah L. Malamud
Patent Examiner
Art Unit 3766